



# UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE  
United States Patent and Trademark Office  
Address: COMMISSIONER FOR PATENTS  
P.O. Box 1450  
Alexandria, Virginia 22313-1450  
[www.uspto.gov](http://www.uspto.gov)

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/439,655	11/12/1999	BRIAN D. MORRISON	1843	1910
7590	02/22/2005		EXAMINER	
ELLEN T DEC GENERAL COUNSEL NATIONAL STARCH AND CHEMICAL COMPANY BOX 6500 BRIDGEWATER, NJ 088070500			REDDICK, MARIE L	
			ART UNIT	PAPER NUMBER
			1713	

DATE MAILED: 02/22/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

<b>Office Action Summary</b>	<b>Application No.</b>	<b>Applicant(s)</b>
	09/439,655	MORRISON ET AL.
	<b>Examiner</b>	<b>Art Unit</b>
	Judy M. Reddick	1713

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --  
**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

#### Status

- 1) Responsive to communication(s) filed on 02 December 2004.
- 2a) This action is **FINAL**.                    2b) This action is non-final.
- 3) Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

#### Disposition of Claims

- 4) Claim(s) 1,4-11 and 13-20 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) Claim(s) \_\_\_\_\_ is/are allowed.
- 6) Claim(s) 1,4-11 and 13-20 is/are rejected.
- 7) Claim(s) \_\_\_\_\_ is/are objected to.
- 8) Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

#### Application Papers

- 9) The specification is objected to by the Examiner.
- 10) The drawing(s) filed on \_\_\_\_\_ is/are: a) accepted or b) objected to by the Examiner.  
 Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
 Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

#### Priority under 35 U.S.C. § 119

- 12) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
  - a) All    b) Some \* c) None of:
    1. Certified copies of the priority documents have been received.
    2. Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
    3. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

#### Attachment(s)

- |                                                                                                                        |                                                                             |
|------------------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892)                                                       | 4) <input type="checkbox"/> Interview Summary (PTO-413)                     |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)                                   | Paper No(s)/Mail Date: _____                                                |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)<br>Paper No(s)/Mail Date _____ | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
|                                                                                                                        | 6) <input type="checkbox"/> Other: _____                                    |

DETAILED ACTION

Claim Rejections - 35 USC § 102

1. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

2. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

3. Claims 1, 4-9, 11, 14, 16, 17, 19 and 20 are rejected under 35 U.S.C. 102(b) as anticipated by or, in the alternative, under 35 U.S.C. 103(a) as obvious over Kosaka et al(U.S. 3,944,695).

Kosaka et al teach a molten (hot melt) printing composition characterized as having high adhesive strength (col. 1, line 30) for coating a substrate such as paper, fabric, plastics, wood, metal, etc. at temperatures of 90 to 230 degrees C (194 to 446 degrees F), wherein said composition is defined basically as containing 10 to 60 % by weight of at least one tackifier which includes terpene resins, hydrogenated cyclopentadiene resins, cumarone-indene resins, styrene-olefin copolymers, rosins, hydrogenated rosin-polyol ester, rosins of pentaerythritol esters, etc.(sufficient to meet the limitations per claims 1 b), 7, 8 b) and 8 c) and 17 b) and 17 c)), 5 to 50 % by weight of at least one wax component including a paraffin wax having a melting point of 100 degrees F to 160 degrees F and a synthetic wax such as polyethylene and polypropylene waxes (sufficient to meet the limitations per claims 1 c), 6, 8 d) and 17 c)), 10 to 60 % by weight of an ethylene-vinyl acetate copolymer which contains 5 to 50 % by weight of vinyl acetate and has a melt index of 4 to 1000 g/10 min(sufficient to meet the limitations per claims 1 a), 4, 5, 8 a), 11, 14, 17 a) and 19), 5 to 40 % by weight of a filler and a pigment. See, the Abstract, col. 1, lines 34-68, col. 2, lines 1-68, col. 3, lines 45-59, the Runs and claims of Kosaka et al. Kosaka et al therefore anticipate the instantly claimed invention with the understanding that the molten composition of Kosaka et al overlaps in scope with the claimed hot melt composition. It appears that the

limitation per claims 1, 8 and 17 "wherein the hot melt composition can be applied to a piece of substrate at a temperature for bonding said substrate to a second piece of substrate" is met by Kosaka et al (col. 2, lines 45-68) or would have been reasonably expected since the molten composition of Kosaka et al is essentially the same as the claimed hot melt adhesive composition.

It has been held that where applicant claims a composition in terms of function, property or characteristic where said function is not explicitly shown by the reference and where the Examiner has explained why the function, property or characteristics is considered inherent in the prior art, it is appropriate for the Examiner to make a rejection under both the applicable sections of 35 USC 102 and 35 USC 103 such that the burden is placed upon applicant to provide clear evidence that the respective compositions do, in fact, differ as provided for under the guise of *In re Best*, 195 USPQ 430, 433 (CCPA 1977); *In re Fitzgerald et al*, 205 USPQ 594.

The utility of the hot melt composition of Kosaka et al as a carton, case or tray (9, 16 & 20) is tenable since the composition of Kosaka et al is essentially the same as the claimed composition.

Even if it turns out that the Examiner has somehow missed the boat and the claims are not anticipated by the disclosure of Kosaka et al, it would have been obvious to the skilled artisan to extrapolate, from the disclosure of Kosaka et al, the precisely defined hot melt adhesive composition, as claimed, as per such having been within the purview of the general disclosure of Kosaka et al and with a reasonable expectation of success.

As to the remaining dependent claims, if not taught or suggested, the limitations would have been obvious to the skilled artisan and with a reasonable expectation of success, i.e., any additional or particular claim parameters which may not be specifically set out in the reference is considered to be inherent in the reference products or not to involve anything unobvious absent a showing to the contrary.

As to the "consisting essentially of" clause, such limits the scope of a claim to the specified ingredients and to those that do not materially affect the basic and novel characteristics of applicant's composition (*Ex parte Davis*, 80 USPQ 448 (PTO Bd. App. 1948); *In re Janakirama-Rao*, 317 F 2d 951, 137 USPQ 893 (CCPA 1963)).

Claim Rejections - 35 USC § 103

4. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

Art Unit: 1713

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

5. The factual inquiries set forth in *Graham v. John Deere Co.*, 383 U.S. 1, 148 USPQ 459 (1966), that are applied for establishing a background for determining obviousness under 35 U.S.C. 103(a) are summarized as follows:

1. Determining the scope and contents of the prior art.
2. Ascertaining the differences between the prior art and the claims at issue.
3. Resolving the level of ordinary skill in the pertinent art.
4. Considering objective evidence present in the application indicating obviousness or nonobviousness.

6. Claims 10, 13, 15 and 18 are rejected under 35 U.S.C. 103(a) as being unpatentable over Kosaka et al(U.S. 3,944,695) in combination with Kosaka et al(U.S. 3,896,069).

Kosaka et al is relied upon for all that is taught as stated in the Grounds of Rejection supra as applied to claims 1, 4-9, 11, 14, 16, 17, 19 and 20. Further, the disclosure of Kosaka et al differs basically from the claimed invention as per the non-express disclosure of an embodiment directed to the use of a "terpene phenolic" as a tackifier component in the disclosed molten composition. However, Kosaka et al'069 teach the use of rosins, terpene phenol resins, terpene resins, etc. as tackifiers in similar such ethylene-vinyl acetate/wax-governed hot-melt compositions. Therefore, it would have been obvious to the skilled artisan to use the terpene phenol resin of Kosaka et al'069 in lieu of or in addition to at least the terpene resins and rosins of Kosaka et al'695, based on their identified equivalency in scope, and with a reasonable expectation of improving the adhesive properties of the composition of Kosaka et al'695 and/or equivalent results, i.e. with a reasonable expectation of success, absent some evidence of unusual or unexpected results. See, e.g., col. 3, lines 28-68 to col. 2, lines 1-35 of Kosaka et al'069.

#### Claim Rejections - 35 USC § 102

7. Claims 1, 4-11 and 13-20 are rejected under 35 U.S.C. 102(b) as anticipated by or, in the alternative, under 35 U.S.C. 103(a) as obvious over Kosaka et al(U.S. 3,896,069).

Kosaka et al disclose and exemplify hot melt adhesive compositions, useful in a variety of fields which include bookbinding, woodworking, plywood making, packaging, paper articles, etc. wherein, said compositions are applied to substrates at temperatures of 70 to 300 degrees C(158 to 572 F) and preferably 90 to 200 degrees C(194 to 392 F) and wherein, said compositions are defined basically as containing 5 to 60 % by weight of an ethylene-vinyl acetate

copolymer having a melt index of 1 to 1000 g/10 min and a vinyl acetate content of 10 to 45 % by weight(sufficient to meet the limitations per claims 1 a), 4, 5, 8 a), 11, 14, 17 a) and 19), 10 to 70 % by weight of at least one of a tackifier which includes terpene resins, terpene phenol resins, rosins, pentaerythritol, etc.(sufficient to meet the limitations per claims 1 b), 7, 8 b) & 8 c), 10, 13, 15, 17 b) & 17 c) and 18), 1 to 80 % by weight of a wax which includes paraffin waxes synthetic waxes, etc. and having melting points of 100 to 300 degrees F(sufficient to meet the limitations per claims 1 c), 6, 8 d) and 17 c)) and other conventional additives which include plasticizer, non-tacky resin, filler, pigment and rubber. See, the Abstract, cols. 1-7, the Runs, especially Run 1 which teaches that the hot melt adhesive compositions are coated on a corrugated board and another corrugated board was plied onto the coated surface under pressure, and the Claims of Kosaka et al. Kosaka et al therefore anticipate the instantly claimed invention with the understanding that the hot melt adhesive composition of Kosaka et al overlaps in scope with the claimed hot melt adhesive.

It has been held that where applicant claims a composition in terms of function, property or characteristic where said function is not explicitly shown by the reference and where the Examiner has explained why the function, property or characteristics is considered inherent in the prior art, it is appropriate for the Examiner to make a rejection under both the applicable sections of 35 USC 102 and 35 USC 103 such that the burden is placed upon applicant to provide clear evidence that the respective compositions do, in fact, differ as provided for under the guise of *In re Best*, 195 USPQ 430, 433(CCPA 1977); *In re Fitzgerald et al*, 205 USPQ 594.

The utility of the hot melt composition of Kosaka et al as a carton, case or tray (9, 16 & 20) is tenable since the composition of Kosaka et al is essentially the same as the claimed composition.

Even if it turns out that the Examiner has somehow missed the boat and the claims are not anticipated by the disclosure of Kosaka et al, it would have been obvious to the skilled artisan to extrapolate, from the disclosure of Kosaka et al, the precisely defined hot melt adhesive composition, as claimed, as per such having been within the purview of the general disclosure of Kosaka et al and with a reasonable expectation of success.

As to the remaining dependent claims, if not taught or suggested, the limitations would have been obvious to the skilled artisan and with a reasonable expectation of success, i.e., any additional or particular claim parameters which may not be specifically set out in the reference is considered to be inherent in the reference products or not to involve anything unobvious absent a showing to the contrary.

As to the "consisting essentially of" clause, such limits the scope of a claim to the specified ingredients and to those that do not materially affect the basic and novel characteristics of applicant's composition (Ex parte Davis, 80 USPQ 448 (PTO Bd. App. 1948); In re Janakirama-Rao, 317 F 2d 951, 137 USPQ 893 (CCPA 1963)).

Claim Rejections - 35 USC § 102

8. Claims 1, 4-6, 7, 9, 10, 13, 17, 18 and 20 are rejected under 35 U.S.C. 102(b) as anticipated by or, in the alternative, under 35 U.S.C. 103(a) as obvious over Liedermooy et al(U.S. 5,500,472).

Liedermooy et al teach and exemplify hot melt adhesive compositions, useful in forming a case, carton and tray, wherein the adhesive compositions are applied at temperatures of 107 degrees C to 135 degrees C(224 to 275 degrees C) and wherein, the hot melt adhesive compositions are defined basically as containing 15-40 wt.% of ethylene-n-butyl acrylate copolymer, 25-55 wt.% of a terpene phenolic tackifying resin or a hydrogenated derivative thereof having a Ring and Ball softening point of less than 125 degrees C, 15 to 40 wt.% of a synthetic Fischer-Tropsch wax having a melting point of 180 degrees F, up to about 20 wt.% of an ethylene-vinyl acetate polymer containing 10 to 40 wt.% of vinyl acetate and other conventional additives such as stabilizers. Liedermooy et al exemplify the application of the hot melt adhesive compositions, at temperatures of 121 degrees C(249 degrees F), to a first strip of Kraft paper and placed over the first strip is a second strip of Kraft paper so as to bond said first strip to said second strip(sufficient to meet the limitations of claims 1 and 17). See, e.g., the Abstract, the paragraph bridging cols. 1-2, col. 2, lines 1-67, col. 3, lines 1-35 and the Runs and Claims and especially Runs 3 and 6 of Liedermooy et al. Liedermooy et al therefore anticipate the instantly claimed invention with the understanding that the hot melt adhesive composition of Liedermooy et al overlaps in scope with the claimed hot melt adhesive composition.

It has been held that where applicants claims a composition in terms of function, property or characteristic where said function is not explicitly shown by the reference and where the Examiner has explained why the function, property or characteristics is considered inherent in the prior art, it is appropriate for the Examiner to make a rejection under both the applicable sections of 35 USC 102 and 35 USC 103 such that the burden is placed upon applicant to provide clear evidence that the respective compositions do, in fact, differ as provided for under the guise of In re Best, 195 USPQ 430, 433(CCPA 1977); In re Fitzgerald et al, 205 USPQ 594.

Even if it turns out that the claims are not anticipated by the disclosure of Lidermooy et al, it would have been obvious to the skilled artisan to extrapolate, from the disclosure of Lidermooy et al, the precisely defined hot melt adhesive composition, as claimed, as per such having been within the purview of the general disclosure of Lidermooy et al and with a reasonable expectation of success.

As to the remaining dependent claims, if not taught or suggested, the limitations would have been obvious to the skilled artisan and with a reasonable expectation of success, i.e., any additional or particular claim parameters which may not be specifically set out in the reference is considered to be inherent in the reference products or not to involve anything unobvious absent a showing to the contrary.

As to the "consisting essentially of" clause, such limits the scope of a claim to the specified ingredients and to those that do not materially affect the basic and novel characteristics of applicant's composition (Ex parte Davis, 80 USPQ 448 (PTO Bd. App. 1948); In re Janakirama-Rao, 317 F 2d 951, 137 USPQ 893 (CCPA 1963)).

#### Response to Arguments

9. Applicant's arguments filed 12/02/04 have been fully considered but they are not persuasive.

Relative to Kosaka et al'695--As to Counsel's arguments that the components are selected to be useful for the contemplated purpose and must contain a filler and a pigment, the claimed "comprising" term leaves the claims open for the inclusion of unspecified ingredients, even in major amounts (Ex parte Davis, 80 USPQ 448, PTO Board. App. 1948) and the claimed "consisting essentially of" clauses limits the scope of the claim to the specified ingredients and to those that do not materially affect the basic and novel characteristics of a composition (Ex parte Davis, 80 USPQ 448, PTO Board. App. 1948 and In re Janakirama-Rao, 317 F 2d 951, 137 USPQ 893, CCPA 1963). When applicant contends that modifying components (filler & pigment) in the reference composition are excluded by the recitation "consisting essentially of", applicant has the burden of showing that the introduction of these components would materially change the characteristics of applicant's composition (In re De Lajarte, 337 F 2d 870, 143 USPQ 256 (CCPA 1964)). It would be expected that any property or characteristic claimed by applicant would be inherent in the composition of Kosaka et al since the composition of Kosaka et al is essentially the same as the claimed composition. There is nothing ironclad on this record rebutting this issue. It is Applicant and not the Examiner who has failed to adequately defend why the property or characteristic claimed by applicants is *not inherent* in the cited prior art.

Moreover, mere Counsel's arguments unsupported by factual evidence are given little weight (*In re Lindner*, 457 F.2d 506, 508, 173 USPQ 356, 358 (CCPA 1972).

Relative to Kosaka et al'695 in combination with Kosaka et al'069-- It is urged and maintained that the instantly claimed invention is obvious within the meaning of 35 USC 103 (a) over Kosaka et al'695 in combination with Kosaka et al'069 as per reasons clearly stated in the Grounds of Rejection supra. Counsel argues that the *exemplified* compositions of Kosaka et al'069 contain an oxidized low molecular weight polypropylene and none of the *exemplified* compositions of Kosaka et al'069 disclose the use of an ethylene-vinyl acetate copolymer, terpene phenolic tackifier or wax, as claimed by applicant. Firstly, the claims, in there present form, do not preclude the oxidized polypropylene component of Kosaka et al'069 (Refer to the argument supra). Furthermore, Counsel is herein reminded that a reference is evaluated, as a whole, for what it fairly teaches and not limited solely to the working examples and, to this end, disclosed examples and preferred embodiments do not constitute a teaching away from a broader disclosure or nonpreferred embodiments. *In re Susi*, 440 F.2d 442, 169 USPQ 423 (CCPA 1971). "A known or obvious composition does not become patentable simply because it has been described as somewhat inferior to some other product for the same use." *In re Gurley*, 27 F.3d 551, 554, 31 USPQ2d 1130, 1132 (Fed. Cir. 1994).

All disclosures in reference patent must be evaluated, including nonpreferred embodiments; reference is not limited to disclosure of specific working examples. *In re Mills and Palmer*, 176 USPQ 196 (CCPA 1972).

Relative to Kosaka et al'069--It is urged and maintained that the disclosure of Kosaka et al clearly anticipates the instantly claimed invention. The claims, in their present form, simply do not preclude the "oxidized polypropylene" component of Kosaka et al as per reasons stated supra (paragraph no. 7). Counsel is herein reminded that a reference is evaluated, as a whole, for what it fairly teaches and not limited solely to the working examples and, to this end, disclosed examples and preferred embodiments do not constitute a teaching away from a broader disclosure or nonpreferred embodiments. *In re Susi*, 440 F.2d 442, 169 USPQ 423 (CCPA 1971). "A known or obvious composition does not become patentable simply because it has been described as somewhat inferior to some other product for the same use." *In re Gurley*, 27 F.3d 551, 554, 31 USPQ2d 1130, 1132 (Fed. Cir. 1994).

All disclosures in reference patent must be evaluated, including nonpreferred embodiments; reference is not limited to disclosure of specific working examples. *In re Mills and Palmer*, 176 USPQ 196 (CCPA 1972).

Relative to Liedermooy et al--As to Counsel's arguments that there is no disclosure or suggestion that a low application temperature hot melt adhesive may be prepared using an ethylene-vinyl acetate copolymer as claimed, Counsel is cordially directed to col. 2, lines 52-56, col. 3, lines 1-11 and the Runs. As to Counsel's argument that Liedermooy fails to disclose an ethylene-vinyl acetate copolymer-based low application temperature hot melt adhesive containing a terpene phenolic tackifier, Counsel is cordially directed to the paragraph bridging cols. 1-2.

Conclusion

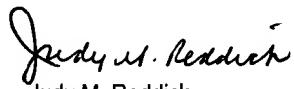
10. THIS ACTION IS MADE FINAL. Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Judy M. Reddick whose telephone number is (571) 272-1110. The examiner can normally be reached on 6:00 a.m. - 2:30 p.m..

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, David Wu can be reached on (571) 272-1114. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

  
Judy M. Reddick  
Primary Examiner  
Art Unit 1713

Application/Control Number: 09/439,655

Art Unit: 1713

Page 10

JMR *[Signature]*  
02.18.05